

ABSTRACT

An electrical component with a printed circuit board. The printed circuit board has an upper face and a lower face. A microprocessor is mounted to the upper face. A capacitor is mounted to the lower face. The capacitor has a first face parallel to the printed circuit board and a second face opposite to the first face. First plates and second plates are in alternating planar relationship with a dielectric therebetween and arranged in a plane perpendicular to the plane created by the circuit board. Each first plate has a first coupling tab and a power tab on opposing edges wherein the first coupling tab terminates at the first face and the power tab terminates at the second face. Each second plate of the second plates comprises a second coupling tab and a ground tab on opposing edges wherein the second coupling tab terminates at the first face and the ground tab terminates at the second face. The first coupling tab and the second coupling tab are in electrical contact with the microprocessor.